

FIRE AND EMERGENCY MEDICAL SERVICES

DESCRIPTION

The mission of the Fire and Emergency Medical Services (EMS) Department is "to provide customer-valued service in the prevention of loss, protection from hazards, and in emergency response through the dedication and excellence of our members." Their vision, "to become the premier provider of public safety services," is carried out through the department's eight divisions: Administration, Emergency Operations, Fire and Life Safety, Training and Safety, Maintenance and Logistics, Emergency Management, Emergency Medical Services, and Information Management and Technology.

The Fire and EMS Department provides fire suppression services, emergency medical services, fire and injury prevention programs, and training for

members, businesses, and industry. Fire and EMS is also responsible for coordinating emergency preparedness and response in the event of natural disasters, weather extremes, hazardous materials incidents, terrorist incidents, or technical rescues and entrapments.

The department strives to meet reasonable response times with available resources and continuously receives high marks from the public. Prompt, reliable, effective, and efficient services are provided 24 hours a day. In the most recent citizen satisfaction survey, Fire and EMS was voted the most highly rated county service with an 89 percent approval rating.

FINANCIAL ACTIVITY

	FY2002 Actual	FY2003 Adopted	FY2004 Biennial Planned	FY2004 Adopted	Change FY2003 to FY2004	FY2005 Projected	FY2006 Projected	FY2007 Projected
Personnel	\$23,834,798	\$26,564,600	\$27,770,000	\$28,576,400	7.6%	\$28,982,200	\$30,018,600	\$30,018,600
Operating	3,386,487	3,387,700	3,619,700	3,971,700	17.2%	4,133,800	4,297,400	4,297,400
Capital	<u>917,072</u>	<u>389,000</u>	<u>389,000</u>	<u>937,700</u>	141.1%	<u>907,700</u>	<u>907,700</u>	<u>907,700</u>
Total	\$28,138,357	\$30,341,300	\$31,778,700	\$33,485,800	10.4%	\$34,023,700	\$35,223,700	\$35,223,700
Revenue	<u>1,041,387</u>	<u>1,766,700</u>	<u>2,090,400</u>	<u>2,682,000</u>	51.8%	<u>2,682,000</u>	<u>2,682,000</u>	<u>2,682,000</u>
Net Cost	\$27,096,971	\$28,574,600	\$29,688,300	\$30,803,800	7.8%	\$31,341,700	\$32,541,700	\$32,541,700
FT Pos.	376	405	425	430	25	430	448	448

BUDGET ANALYSIS AND EVALUATION

The FY2004 budget includes 25 new full-time positions for the Fire department. Eighteen of the new positions are to staff the River's Bend Fire Station, which is projected to open in the winter of 2003. The budget also funds the balance of a year's personnel and operating expenses for River's Bend, including uniforms and training.

Currently there is a nationwide shortage of paramedics impacting almost every EMS system in the country; competing with neighboring jurisdictions for talented employees continues to be

a challenge. A new position will be created for a recruitment and retention officer who will play a critical role in hiring qualified personnel as new fire stations come on line and current staff retires. The recruitment and retention officer will be proactive in increasing diversity within the Fire and EMS Division. Programs have already been implemented to reach minorities and women for consideration during the hiring process.

To address staffing issues in accordance with Occupational Safety and Health (OSHA) mandates

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and the National Fire Protection Association (NFPA) standard 1710, an additional \$250,000 has been added to the Emergency Medical Services budget for minimum staffing. This translates to three additional firefighters, which will bring a total of seven fire stations to a minimum staff level of four personnel.

A new position will be established in the Office of the Fire Marshal to assist in regulating and monitoring open burning in Chesterfield County. Citizen complaints on open burning require staff time and frequently require additional time from members of the Board of Supervisors. The Fire Department will offset the cost of the position with new revenue from burn permits, as developers will be charged a fee of \$400 for a permit that would allow open burning of material in excess of 320 cubic feet. The fee will not affect homeowners who burn tree or garden trimmings. The new inspector will also conduct fire safety inspections when not involved with open burning. Projected revenue from the sale of permits is \$90,000 in FY2004, which covers personnel expenses, the cost of a new vehicle for the inspector, and other necessary equipment and supplies.

FY2003 was the first full year of the newly implemented revenue recovery program where fees are collected for emergency medical services. Based on anticipated collection rates, FY2004 revenue is expected to be \$763,700 higher than in the previous year. After subtracting costs necessary to run the program, \$652,100 will remain available to return to the program for service enhancements.

With revenue recovery dollars, a new position will be established for an Operational Medical Director (OMD) to oversee the clinical aspects of agency operations, assume responsibility as medical director for the regional Med-Flight program, and to define and set the standard of care for the entire county EMS system. The OMD will also be actively involved in the evaluation of the EMS system through quality assurance and quality improvement. A Quality Assurance Coordinator/RN position will be established and will report to the OMD. This position will be required to oversee quality assurance, quality improvement, and future planning for all EMS services, while interfacing with

the volunteer rescue squads to establish goals for training and response to actual emergency situations.

Other revenue recovery service enhancements included in the budget are the replacement and purchase of new Hurst tools and defibrillators, funding to re-chassis an ambulance, and additional funding for advanced life support staffing issues.

The Emergency Systems Integration project, which includes funding from prior years and continues through FY2006 will involve the implementation and unification of the Computer-Aided Dispatch System (CADS) with automatic vehicle location, a Fire & EMS records management system, and a mobile communications system within the Emergency Communications Center. The FY2004 budget provides \$80,800 for network infrastructure upgrades and the FY2004 Capital Improvement Program (CIP) provides an additional \$315,000 for further upgrades and the purchase of additional Fire, EMS and administrative computers. This funding will enable the department to accept computer applications associated with the Emergency Systems Integration project. An upgrade of the Wireless Local Area Network is also included in the CIP funding to allow the transmission of data from fire and rescue stations to servers at IST. The upgrade will assist in integrating the new records management system, the CADS, and mobile data computers. Increased funding in future year budgets will be necessary to address costs associated with network fees for the CADS project.

The FY2004 Technology Improvement Program (TIP) includes \$130,000 to improve the Technical Services Unit by replacing outdated audio and visual equipment with new digital equipment. The department's current editing devices and video cameras are approximately 12 years old.

The Winterpock Fire Station opened in FY2003 and the FY2004 budget provides for the balance of a year's funding in operating expenses for the new station. The FY2004 budget also includes additional funding for increased service vehicle costs and a merit increase for staff.

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HOW ARE WE DOING?

Goal: To be the safest and most secure community as compared to similar jurisdictions
Supports countywide strategic goal number 4

Objective: Maintain a well-coordinated public safety system that ensures maximum protection to save life and property

Measure: Value of property lost per capita due to fire



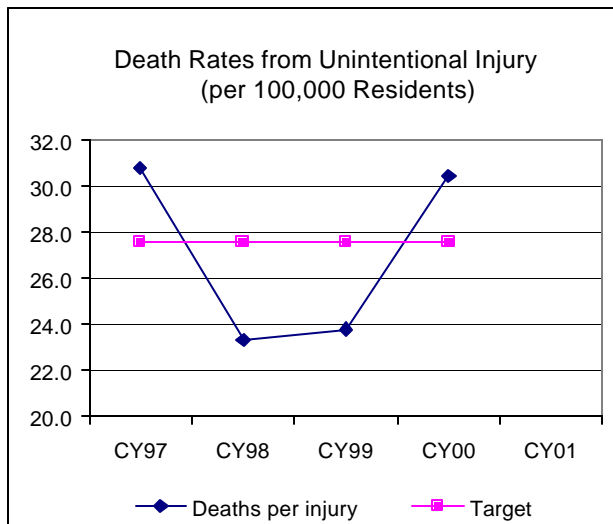
Initiatives

- Fire and Life Safety programs
- Fire and Life Safety House
- Smoke detector giveaway
- Plans reviewed
- Fire inspections
- Fire response time

Goal: To be the safest and most secure community as compared to similar jurisdictions
Supports countywide strategic goal number 4

Objective: Maintain a well-coordinated public safety system that ensures maximum protection to save life and property

Measure: Death rates from unintentional injury per 100,000 population (including all Chesterfield residents within the state)



Initiatives

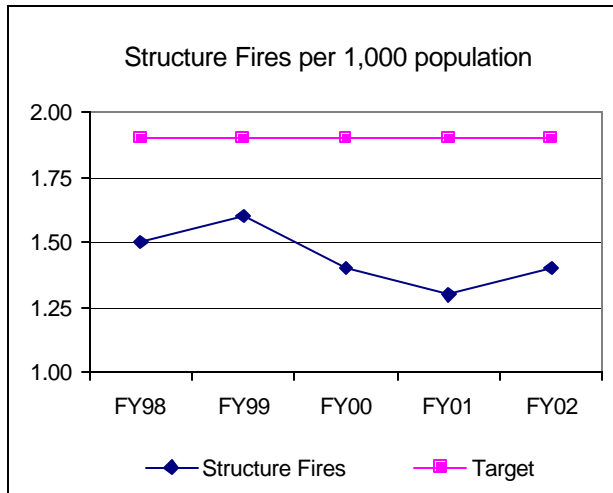
- New medical procedures
- Advanced Life Support availability
- Life Safety and accident programs
- Basic Life Support response time goal
- Child safety seat installation assistance

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Goal: To be the safest and most secure community as compared to similar jurisdictions
Supports countywide strategic goal number 4

Objective: Maintain a well-coordinated public safety system that ensures maximum protection to save life and property

Measure: Number of structure fires per 1,000 population



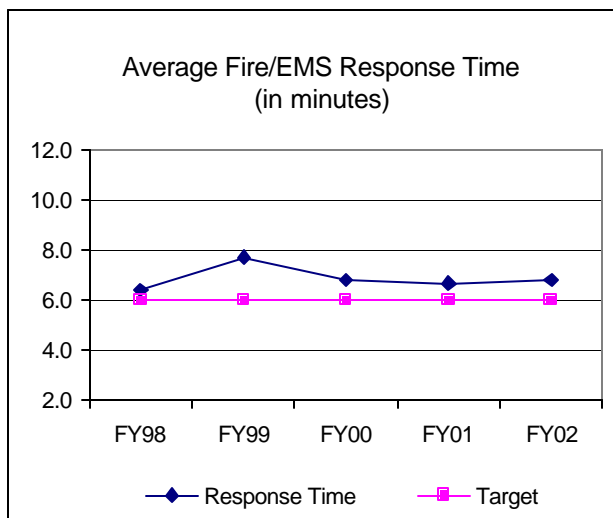
Initiatives

- Fire and Life Safety programs
- Fire and Life Safety House
- Smoke detector giveaway
- Plans reviewed
- Fire inspections
- Community group program participation

Goal: To be the safest and most secure community as compared to similar jurisdictions
Supports countywide strategic goal number 4

Objective: Priority response to life-threatening and significant emergencies

Measure: Average Fire/EMS response time compared to established benchmarks



Initiatives

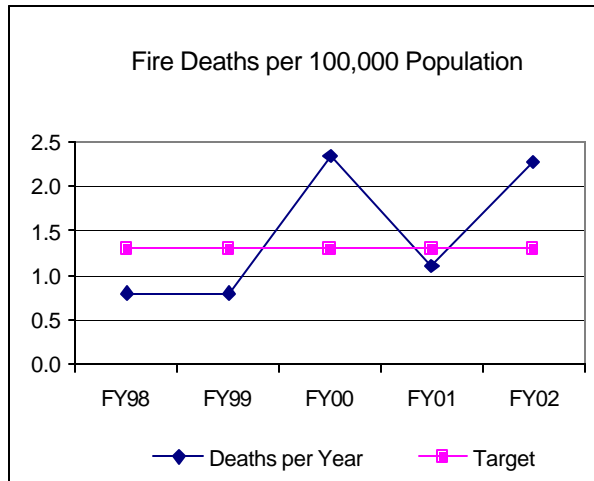
- New Fire/Rescue stations
- Subdivision planning work
- Opticom
- ECC Quality Assurance program
- House numbering program
- Quick Response EMS vehicle

FIRE AND EMERGENCY MEDICAL SERVICES

Goal: To be the safest and most secure community as compared to similar jurisdictions
Supports countywide strategic goal number 4

Objective: Maintain a well-coordinated public safety system that ensures maximum protection to save life and property

Measure: Fire deaths per year per 100,000 population



Initiatives

- Fire and Life Safety programs
- Fire and Life Safety House
- Smoke detector giveaway
- Plans reviewed
- Fire inspections
- Fire response time

WHERE ARE WE GOING?

As the county continues to grow and in order to maintain and improve response times, new facilities are becoming more critical. The FY2004-FY2010 Capital Improvement Program (CIP) includes the funding necessary to construct two new fire stations in addition to Rivers Bend and Courthouse, which are funded in prior years. River's Bend is scheduled to open in FY2004 and the balance of a year's funding is projected for the River's Bend Fire Station in FY2005. Design is currently underway for the Courthouse Fire Station. Funding for personnel and operating expenses for Courthouse will have to be addressed in future budget deliberations; presently twelve months of operating and personnel expenses are projected in FY2006, which includes the addition of 18 full-time positions. The Ashton Creek/Walthall fire station is projected to open in FY2009 and construction of the Otterdale/Duval Fire Station is planned for FY2008 through FY2010. Expenses related to these two stations will be addressed in future budgets.

Other future Fire and EMS Department CIP projects include: additional improvements at the Public Safety Training Center at Enon, the purchase of twenty-five new thermal imaging systems, the purchase of replacement cylinders for self-contained breathing apparatus, and the construction of a new logistics warehouse and equipment repair facility.

The Fire Department has experienced and will continue to experience change within mid and upper level management. In the Emergency Operations division alone, nine of the department's senior staff members will be eligible for retirement in the next four to six years, creating a need to further develop and prepare personnel for leadership and supervisory positions. Additionally as new fire and rescue stations are placed in service, an increase in the number of administrative, training, and support staff will be required to manage personnel.

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FINANCIAL ACTIVITY (by Division)

<u>Division</u>	FY2004			Change		FY2005 Projected	FY2006 Projected	FY2007 Projected
	FY2002 Actual	FY2003 Adopted	Biennial Planned	FY2004 Adopted	FY2003 to FY2004			
Administration	\$1,023,186	\$1,028,100	\$1,028,100	\$1,061,800	3.3%	\$1,707,200	\$2,907,200	\$2,907,200
Emergency Operations	19,992,756	21,829,500	23,190,500	23,935,900	9.6%	23,935,900	23,935,900	23,935,900
Fire and Life Safety	1,535,975	1,489,900	1,489,900	1,575,900	5.8%	1,545,900	1,545,900	1,545,900
Training and Safety	1,149,973	1,192,500	1,192,500	1,291,900	8.3%	1,291,900	1,291,900	1,291,900
Maintenance and Logistics	2,744,491	2,345,250	2,345,250	2,653,600	13.1%	2,576,100	2,576,100	2,576,100
Emergency Management	132,281	139,500	139,500	149,300	7.0%	149,300	149,300	149,300
Emergency Medical Services	880,877	705,750	705,750	780,400	10.6%	780,400	780,400	780,400
Med-Flight	144,166	1,062,300	1,062,300	1,373,100	29.3%	1,373,100	1,373,100	1,373,100
Information Management & Technology	367,778	389,800	466,200	502,000	28.8%	502,000	502,000	502,000
Public Safety Training Center	<u>166,875</u>	<u>158,700</u>	<u>158,700</u>	<u>161,900</u>	2.0%	<u>161,900</u>	<u>161,900</u>	<u>161,900</u>
Total	\$28,138,357	\$30,341,300	\$31,778,700	\$33,485,800	10.4%	\$34,023,700	\$35,223,700	\$35,223,700

ADMINISTRATION

DESCRIPTION

Administrative Services provides leadership and general direction to all divisions within the Fire and EMS Department, Grants and Marketing, and the Emergency Communications Center. Services include budget development and management, personnel administration, and human resource management. Administration also coordinates services provided by Emergency Operations, the volunteer fire departments and rescue squads involved in fire protection, and emergency medical services within the county.

Administration's focus is to proactively lead and direct all divisions in managing human resources and administrative services, to provide financial

support, and to serve the Fire and EMS organization as change agents with a commitment to personal development, open communications, and creative solutions.

The department reviews its strategic business plan during the budget process and works on implementation throughout the year. The Strategic Planning Steering Committee reviews the strategic business plan under the direction of the executive staff. Each division is required to review the strategic business plan and develop division strategies that support the department's objectives. Divisional plans are then supported by work unit strategies.

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BUDGET ANALYSIS AND EVALUATION

Administration will face several significant issues in the next three to five years. Additional staff will be required to assume the increase in budget, accounting, and payroll duties needed to support the four additional fire and rescue stations that were approved in the 1996 Bond Referendum. The

department's technology and automation needs will also continue to increase as the department grows in size and in the complexity of the services it provides. Planning succession for the retirement of key officers will significantly challenge the division.

EMERGENCY OPERATIONS

DESCRIPTION

The Emergency Operations Division responds to a variety of customer emergencies and requests 24 hours a day. Although fire and EMS calls make up the majority of the division's workload, Emergency Operations also responds to hazardous material incidents, technical rescue and industrial accidents, and natural and man-made disasters. The division

responds to any emergency where there is not a clearly defined county agency responsible. Approximately 75% of the Fire Department's personnel are assigned to Emergency Operations and they respond to calls from 18 fire/rescue stations.

BUDGET ANALYSIS AND EVALUATION

The division's objective to respond to 90% of priority one emergencies in the urban corridor within six minutes is constantly being challenged by alarm activity, traffic, and the continued decline of the volunteer system. Emergency Operations continues to assume additional workload generated by the loss of active, productive volunteer fire and rescue personnel. Even though the demand for services in all areas continues to rise, the division persists in meeting its objectives, including continued development of an integrated volunteer and career fire and EMS system, the implementation of recommendations from the Emergency Medical Services Study, and execution of the EMS Revenue Recovery Program.

In the near future, Emergency Operations will be developing a comprehensive staffing and leave management program to control the impact of firefighters taking time off for paid vacation and sick leave. Without the ability to be flexible in approving leave, managers are seeing the division's annual leave liability increase as employees accumulate large leave balances. Continued increases in minimum staffing funds will be necessary to keep pace with the increase in the number of new personnel and salary expenses and in order to avert problems associated with leave usage.

FIRE AND LIFE SAFETY

DESCRIPTION

The primary responsibility of the Fire and Life Safety Division is to promote safe practices, attitudes, and overall safe conditions in dwellings and public buildings. The main objectives are to prevent fire-related deaths and injuries, and property damage.

The Community Programs Section develops and delivers educational programs on fire and life safety and accident prevention to people of all ages throughout the county. Safe and responsible behavior in emergency situations is one of the major

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points of the section's curriculum. Constant interaction with the media affords many opportunities to present a pro-active fire and life safety message to the community.

The Plans Review Section is responsible for plan review and acceptance testing of fire protection systems in multifamily, commercial, and industrial properties. As a member of the County Site Plan Team, the section interacts with developers and architects early in the building design stage to ensure that construction and building features will provide occupants a fire-safe environment. Their proactive approach is a benefit to their customers and to citizens of the county.

BUDGET ANALYSIS AND EVALUATION

As the county's population grows, increased demand is being placed on the services that Fire and Life Safety provide. If resources remain at current levels, the Community Services Section will face challenges in providing the additional quality educational programs that will be required. As construction of multifamily dwellings and commercial space increases, the demand for reviews and acceptance testing by the Plans Review Section also grows. Ensuring that fire-safe structures are

Based on the Virginia Statewide Fire Prevention Code, the Fire Marshal's Section conducts fire safety inspections of commercial properties and multifamily housing units. The inspectors provide reviews of fire safety practices and ensure that fire protection systems are well maintained. They handle questions, complaints, and citizen concerns on policy issues related to open burning, fireworks, and blasting permits. The Fire Marshal's section also investigates fires to determine cause and origin. Results of their investigations are used to determine whether or not criminal acts have been committed and to provide insight into possible fire trends within the community.

built for county citizens and business customers remains a priority. The newly established fire inspector position created to regulate and monitor open burning will also assist in conducting fire safety inspections. Inspections and investigations will continue to increase in volume and an increase in funding for additional personnel and the expansion of programs will need to be evaluated in future budgets.

TRAINING AND SAFETY

DESCRIPTION

The Training and Safety Division coordinates and provides the training necessary to support all phases of the department's emergency operations, including the volunteer rescue squads. Training is conducted throughout the week, including evenings and weekends, to accommodate career and volunteer members. The training staff manages all programs and conducts research to determine any future training needs of the department. The Safety Officer administers a comprehensive Fire Department Safety and Health Program designed to reduce the rate of personnel injuries, accidents, and property damage. Audiovisual support for Fire and EMS and other county departments is managed by the Technical Services Unit, which also has emergency response duties and video communication roles.

Training and Safety's objectives are to:

- develop and present training programs to all career and volunteer fire companies
- provide training programs for fire officers
- conduct the department's promotion process
- provide basic training for firefighter recruits
- manage a comprehensive Safety and Health program to reduce the severity and cost of injuries
- provide incident command staff support to Emergency Operations
- provide local delivery of college classes at the Public Safety Training Center
- recruit and test firefighter candidates, and automate administrative processes to improve overall efficiency.

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BUDGET ANALYSIS AND EVALUATION

During FY2004, Training and Safety will continue to support all existing training programs and certification levels for career and volunteer firefighters. Firefighter recruit school will be held for the new River's Bend station and the section will partner with local universities to offer higher educational opportunities for staff. Training and Safety will also continue to automate administrative processes to improve overall efficiency.

Staff will be positively impacted when the new Public Safety Training Center in Enon opens in 2008 and the physical training program moves to its new location. The integration of volunteer squads with Fire's growing work force places increased demand on training needs and as the number of emergency responses increases, safety programs will require additional resources to maintain the present level of accidents and injuries.

MAINTENANCE AND LOGISTICS

DESCRIPTION

The Maintenance and Logistics Division is responsible for providing logistical support and maintenance to all of the department's facilities,

equipment, and apparatus. The division is also responsible for planning, designing, and overseeing the construction of all new facilities.

BUDGET ANALYSIS AND EVALUATION

Maintenance and Logistics' focal points for FY2004 are to:

- provide Emergency Operations with sufficient apparatus, equipment, and supplies to allow them to continue providing world class customer service
- evaluate and purchase the best and most cost effective apparatus, equipment, and supplies
- evaluate all programs and purchases from a cost/benefit perspective
- maintain a balanced budget.

An increase in the number of service calls, the significant increase in workload associated with the growth of Emergency Medical Services, and the

recent and future addition of new fire and rescue stations requires improved automated systems and more storage space. Resources will need to be evaluated in future budgets for additional fire apparatus and electronic communications equipment that will be needed to maintain an acceptable level of service.

The need for additional funding to address vehicle replacement will also need to be evaluated in future budgets. The department's fleet currently consists of 37 vehicles that are over ten years old or have over 100,000 miles.

EMERGENCY MANAGEMENT

DESCRIPTION

Emergency Management is required by federal and state law to coordinate emergency preparedness, planning, response, and recovery. The Emergency Management Coordinator and a part-time secretary are partially funded by the Federal Emergency Management Agency (FEMA). Federal and state laws mandate industry chemical reporting,

emergency planning, exercise planning, and hazardous materials incident coordination with other agencies in accordance with the Superfund Amendment and Reauthorization Act of 1988, Title III. These requirements are also part of the Chesterfield County Emergency Operations Plan that has been approved by the Board of Supervisors.

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EMERGENCY MEDICAL SERVICES

DESCRIPTION

The Emergency Medical Services (EMS) Division supports Emergency Operations. Emergency medical responses historically represent approximately 70-75 percent of the department's

annual workload. EMS services include both basic and advanced life support, which involves the staffing of fire apparatus and ambulances with over 150 paramedics.

BUDGET ANALYSIS AND EVALUATION

Demand for emergency medical services continues to rise as indicated by an almost 201 percent increase in the number of department responses from 1991 to 2001. Population growth coupled with the rapid increase of aging citizens will continue to stress the EMS system. As new fire stations are built and the volunteer system is integrated with EMS, additional funding for new capital equipment and supplies, continuing education for paramedics and cardiac technicians, and maintenance for bio-medical equipment will need to be evaluated.

The ongoing increase in EMS's workload and the related increase in the department's involvement in emergency medical services will have a definitive impact on requirements. Additional funding will be necessary in future budgets for improved quality assurance and research for clinical effectiveness. An increase in EMS staff is unavoidable.

The county continues to monitor the volunteer squads' current and future staffing numbers to ensure a planned system ready to meet the future demand for EMS.

INFORMATION MANAGEMENT AND TECHNOLOGY

DESCRIPTION

The Information Management and Technology Division provides the organization with computer-based technology management and support, data information management, and planning and research assistance.

The department processes and analyzes data, provides computer and network support, develops applications, trains end-users, and manages data security. The division acts as the department's liaison to the county's Information Systems Technology Division, Emergency Communications Center, Police Department, and other departments on issues relating to automation. Information Management and Technology coordinates the recommendations of the 1994 Information Management Study, the Fire and EMS Department's Automation Planning Committee, and related issues.

Information Management and Technology focuses for FY2004 are to:

- keep abreast of new and emerging computer-based technologies to support continued growth of the organization
- deploy technology-based systems that are properly designed and implemented on time and within budget
- effectively acquire and implement components of the Phase II Radio and Telestaff projects
- provide quality computer-user application and hardware support, and
- support organizational decision-making processes with thorough and effective research and planning efforts.